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## ABSTRACT

The study defines the relationships between agriculture teachers and other persons with whom they work in providing adult agricultural education; specifically, it identifies with whom the instructor cooperated in providing a program, identifies the functions performed by those who cooperated, and identifies the success of the cooperative arrangements. The data were obtained from questionnaires sent to all vocational agriculture instructors responsible for adult instruction in a three-State area. The cooperation of others is measured and analyzed in four different program areas: enterprise events, agriculture mechanics farm management, and special events. Cooperators in these areas and their functions are illustrated in bar graphs; evaluation of cooperation of agencies in the four categories are presented tabularly. It is concluded that there is wide diversity in the amount of cooperation received from among potential cooperating groups, the principle cooperating groups being industry representatives, private businessmen, county agents, and other agricultural teachers. Generally, the teachers find the cooperation of others valuable and rely heavily upon others to assist in planning, organizing and coordinating but not in evaluation. University specialists are not used in any significant degree. (AJ)

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# Staffing Patterns for Programs in Adult Agricultural Education

A Study in Cooperation

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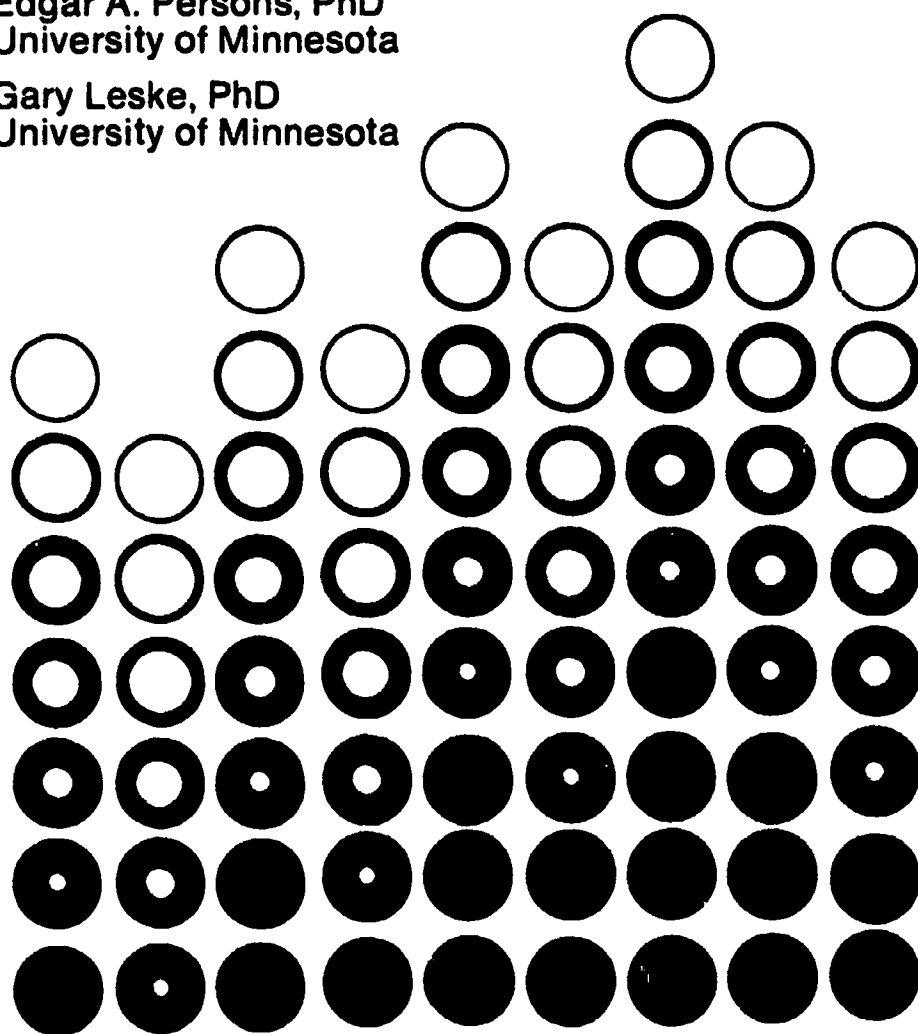
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# Staffing Patterns for Programs in Adult Agricultural Education

A Study in Cooperation

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## ACKNOWLEDGEMENTS

To begin a project which involved data collection in three states without financial support of any kind may to some be pure folly. But when one can secure the able assistance of responsible people to aid in the task, folly turns to feasibility.

The authors are indebted to Dr. Donald Priebe of North Dakota State University and Dr. Hilding Gadda of South Dakota State University for their willing assistance in distributing data instruments to teachers in their respective states and to Dr. Paul Marvin for finding a few extra dollars in his department budget to print and disseminate data instruments to Minnesota teachers.

The Research Coordinating Unit of the University of Minnesota did its share too by providing for the data analysis and final report printing.

And to Eugene Bromenshenkel, who partly out of the goodness of his heart, helped compile the data and develop the graphics, the authors offer a special note of thanks.

It is fitting that a study of cooperation could be done only when many cooperated to accomplish the task.

"Light is the burden when many share the load."

## **INTRODUCTION AND PROBLEM**

Traditionally the high school vocational agriculture teacher has had the primary responsibility for providing adult education through a total vocational agricultural program. These programs have been limited primarily to constituents of the local school service area. Although most communities have several other agencies or organizations providing some forms of adult education, there has been little or no concerted effort to coordinate these programs.

Most adult education programs conducted by the vocational agriculture teachers have been aimed at adult and beginning farmers. There has been only a limited effort to provide adult education for employers or employees in other types of agricultural businesses. With more attention focused on the off-farm aspects of agriculture education, teachers and other educators are looking for ways to serve this newly identified clientele. Educators are claiming a need to take advantage of cooperative effort. Some individuals have found working together on some or all phases of their program an enjoyable and rewarding way in which to accomplish a given educational task; others have not experienced success in cooperative efforts.

The need to examine the cooperative efforts that have taken place to determine their strengths and weaknesses has become apparent. It may be possible to determine combinations of educational resources that are more effective for specific educational goals. For example, in teaching an

enterprise unit in dairy cattle feeding, it may be most effective in terms of both the number of people reached and the quality of the instruction if class administration and instruction is shared by two or more educational agencies. On the other hand, certain kinds of instruction may be most effectively handled by a single agency.

A problem facing vocational agriculture has been that it has not defined the degree of cooperation that now exists. The fairly autonomous nature of the adult program in agriculture has permitted a variety of staffing patterns and organizational procedures. It was considered important to identify what the staffing and organizational patterns were and how effective they have been in meeting educational objectives.

The purpose of this study was to define the relationships between agriculture teachers and other persons with whom they work in providing adult agricultural education.

The specific objectives were:

1. To identify with whom the agriculture instructor cooperated in providing an adult agricultural education program.
2. To identify what functions were performed by those who cooperated.
3. To identify the success of the cooperative arrangements.

Satisfactory accomplishment of these objectives should identify commonly successful cooperative relationships as an input to pre-service and in-service education for instructors. It could provide exemplary cooperative arrangements which may be generalizable. These arrangements might also serve as organizational models to meet the instructional needs of the off-farm agricultural occupations clientele.



## RELATED LITERATURE

The literature search conducted to determine what information was available concerning cooperation in adult education in agriculture did not reveal a great deal of information. Two types of information were most commonly found: philosophical or "what should be" discussions and how the vocational agriculture instructor cooperates with extension agents.

Lawrence et al (3:32) identified as key characteristics of successful adult education programs: (1) selective use of resource specialists as instructors, (2) inter-agency coordination to accomplish training objectives, and (3) a resource manager role for the vocational agriculture teacher to promote aid in coordinating programs.

In discussion of vocational agriculture extension agent interaction, Bender et al (1:17) stated:

...This interaction will not cause one agency to dominate the other or to dictate the program format; on the contrary, it will ensure the effective use of available resource.

Economics dictates that the need for coordinating adult education programs with other adult education agencies will continue, if not increase, in the future. Typical is the joint United States Department of Agriculture - National Association of State Universities and Land-Grant Colleges Study Committee on Cooperative Extension (2:48) recommendation that:

Cooperative Extension Service seek maximum use of Extension manpower resources in agricultural production programs in the following ways: ...cooperate more closely with other agencies offering formal classroom and continuing education programs relating to agricultural production and marketing.

Smith and Hull (5:17) conducted an attitude study which restricted the sample of cooperators to county extension agents. They reported that activities related to planning and conducting meetings provided the best setting for interaction. Their respondents felt cooperation potential existed when: (1) problems situations could be resolved using the special abilities of the teacher or agent, (2) demonstration projects were conducted during field days, (3) committees discussed adult education community needs, and (4) teacher and agent perceived themselves as serving all of the residents in the county.

Omar (4:945) investigated activities and factors in working relationships of county extension agents and vocational agriculture instructors in Michigan and examined differences in opinion regarding these working relationships. He reported significant differences in opinion of teachers and agents with regard to (1) working out a program of cooperation between 4-H club and FFA and (2) arranging for educational meetings for farmers. Responses of the teachers and agents reportedly tended to indicate positive or neutral effects of all the factors except for the intraorganizational factors. These factors were viewed mostly to have a negative effect.

The questions of what cooperation is occurring in adult vocational agriculture, when is it occurring, and is it as valuable as suggested, have not been studied in depth.

## DESIGN OF THE STUDY

### The Sample:

Three states (Minnesota, North Dakota, South Dakota) participated in the cooperation study. The sample to whom questionnaires were sent included all vocational agriculture instructors in North Dakota and South Dakota and all vocational agriculture instructors in Minnesota who were charged with the responsibility for adult instruction for 25 percent or more of their job description. Each state was responsible for surveying their own instructors and assembling the data as it was returned. Questionnaires were mailed to the sample in June and July of 1971.

|                  | <u>Minnesota</u> | <u>South Dakota</u> | <u>North Dakota</u> |
|------------------|------------------|---------------------|---------------------|
| Sample           | 281              | 51                  | 67                  |
| Usable Responses | 138              | 37                  | 24                  |

### The Survey Instrument:

Based upon the objectives of the study, the instrument was designed to answer three basic questions.

1. Who cooperated with you?
2. In what way did they cooperate?
3. How valuable do you judge the cooperation to the success of the event?

Since adult education programs usually fall within the categories of Enterprise Classes, Agriculture Mechanics Classes, Farm Management, and Special Events such as tours and field days; the events for which the agriculture instructor might offer instruction were categorized under those four headings. Twenty-one specific events were listed on the questionnaire with space provided under each of the four major headings for other events to be added. See Appendix A for a sample of the questionnaire.

The persons who may have cooperated were also listed to serve as reminders to the respondents. The following list of possible cooperators was used:

1. Another vo-ag teacher
2. County agent
3. SCS planner
4. ASCS representative
5. Other county level agriculturalist
6. University specialist
7. Private businessman
8. Business or industry representative

Two categories were left open for the addition of others not listed.

Each respondent was asked to identify how the cooperator assisted in the event. For this purpose, the respondent could choose from among seven given functions and the other unspecified function. Functions listed were:

1. Planning
2. Organizing
3. Coordinating

4. Financing
5. Advertising
6. Teaching or presenting
7. Evaluating
8. Other

The teachers perception of how valuable the cooperation was to the success of the event was also considered important. There was no formal way to evaluate the cooperative effort. Since how valuable the teacher thought the cooperation was might be more important to fostering future cooperation than an objective evaluation of the cooperation, the respondent was simply asked to judge the cooperation value. A five point scale was used, offering the opportunity to check any of the following:

1. Very valuable
2. Valuable
3. Did not add nor subtract
4. Hindered the event
5. Caused the event to be unsuccessful

The entire questionnaire was produced on one side of an 11 1/2 x 17 inch paper. A separate one page six question check sheet was included to obtain other information necessary for data analysis.

#### Data Analysis:

The data included on returned questionnaires was placed on coding sheets and then key punched. Processing was done on the computer equipment at the University of Minnesota.

Since there were no statistical tests involved in the data analysis, the program produced only descriptive frequency counts and other description data. Much of the final computation was done manually after initial frequency counts had been made by each of the thirty five events.

For reporting purposes, like kinds of events were grouped together.

## PRESENTATION OF DATA

Because the information in this study is primarily descriptive of the cooperation that exists between departments of vocational agriculture and other agencies, the data is best viewed in graphic form. The primary questions of 1) Who cooperates? 2) How do they cooperate?, and 3) How valuable was the cooperation?, are answered in the series of graphics and charts which follow.

## WHO COOPERATES

Based upon the total variety and number of events in adult education in agriculture in which others might cooperate, Figure 1 illustrates the number of times each of the cooperators or agencies cooperated in some way with the adult agriculture instructor during the 1970-71 contract year.

Abbreviations used in this and subsequent figures identify the following cooperators.

| Abbreviation | Description   |
|--------------|---|
| Other Vo-Ag  | Another teacher of vocational agriculture either from the same school or from a neighboring school. |
| Co-Agent     | County agricultural extension agent employed by the county cooperative extension service.           |
| S.C.S.       | The county planner or other agent of the Soil Conservation Service.                                 |

|                  |   |
|------------------|---|
| A.S.C.S.         | The office manager or other agent of the Agricultural Stabilization and Conservation Service.   |
| Other Co. Agr.   | Other agricultural professionals attached to a county service or regulatory agencies.   |
| Univ. Spec.      | A specialist from the agricultural college of the university either representing the specialist staff of the cooperative extension service or acting as an independent agent. |
| Private Bus. Man | An owner-manager of a business firm.  |
| Ind. Rep.        | An employee of a business firm representing his employer or company in the education about or the promotion of a company product or service.                                  |
| Other            | Any cooperator (not specified) who does not fit into one of the previous categories.  |

Enterprise Classes:

Enterprise classes are defined as organized class sessions devoted to the promotion, operation, or improvement of a specific farm enterprise such as dairy cattle, beef cows, corn, soybeans, etc. Such classes are normally open to the public and range in content and subject matter depth according to the assessed needs of the community. Figure 2 illustrates the degree of cooperation experienced in three broad categories of enterprise classes: livestock, crops and other.



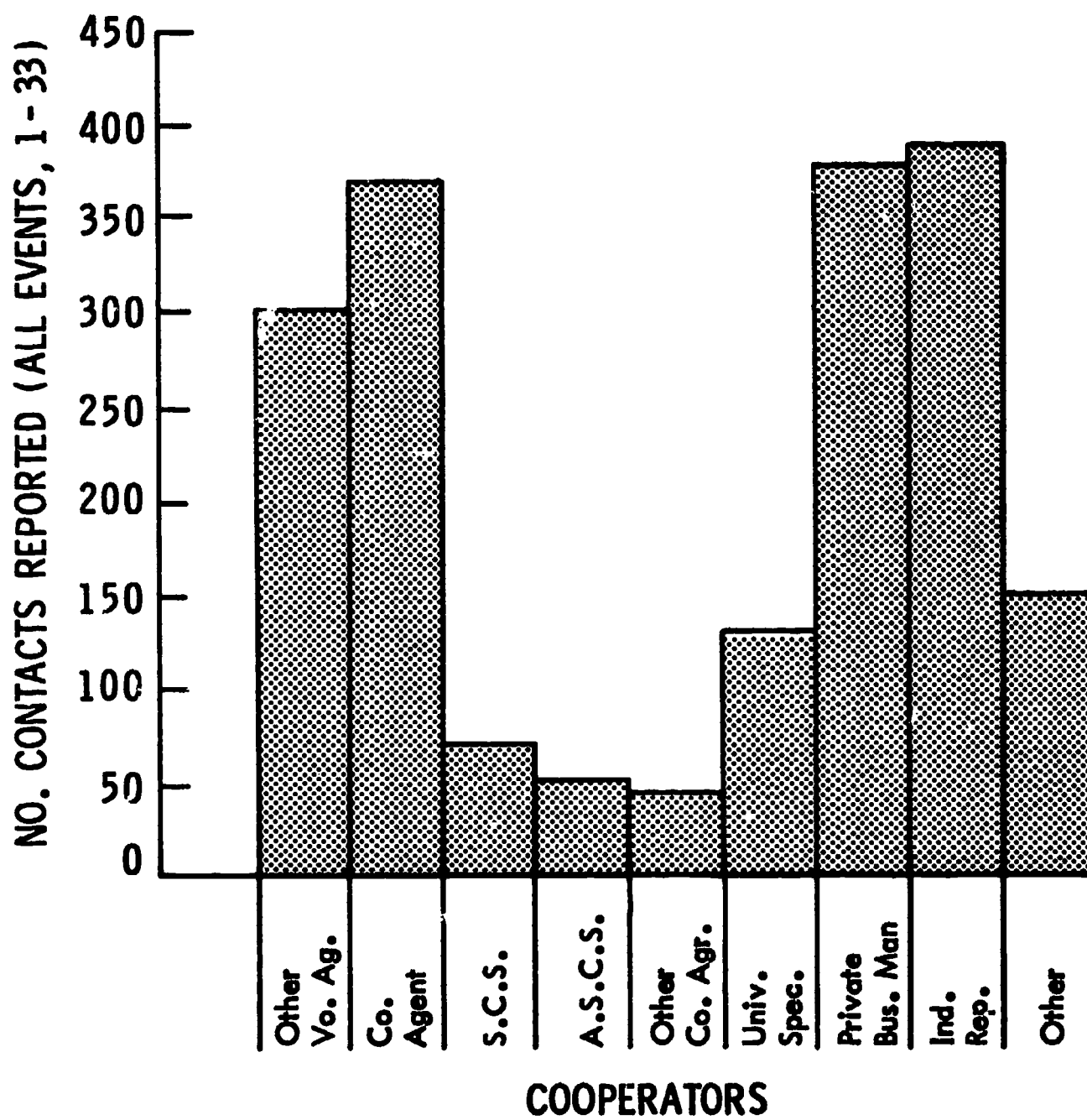


Figure 1. Cooperation of others with the vo-ag instructor in the conduct of adult education events.

# ENTERPRISE EVENTS

-12-

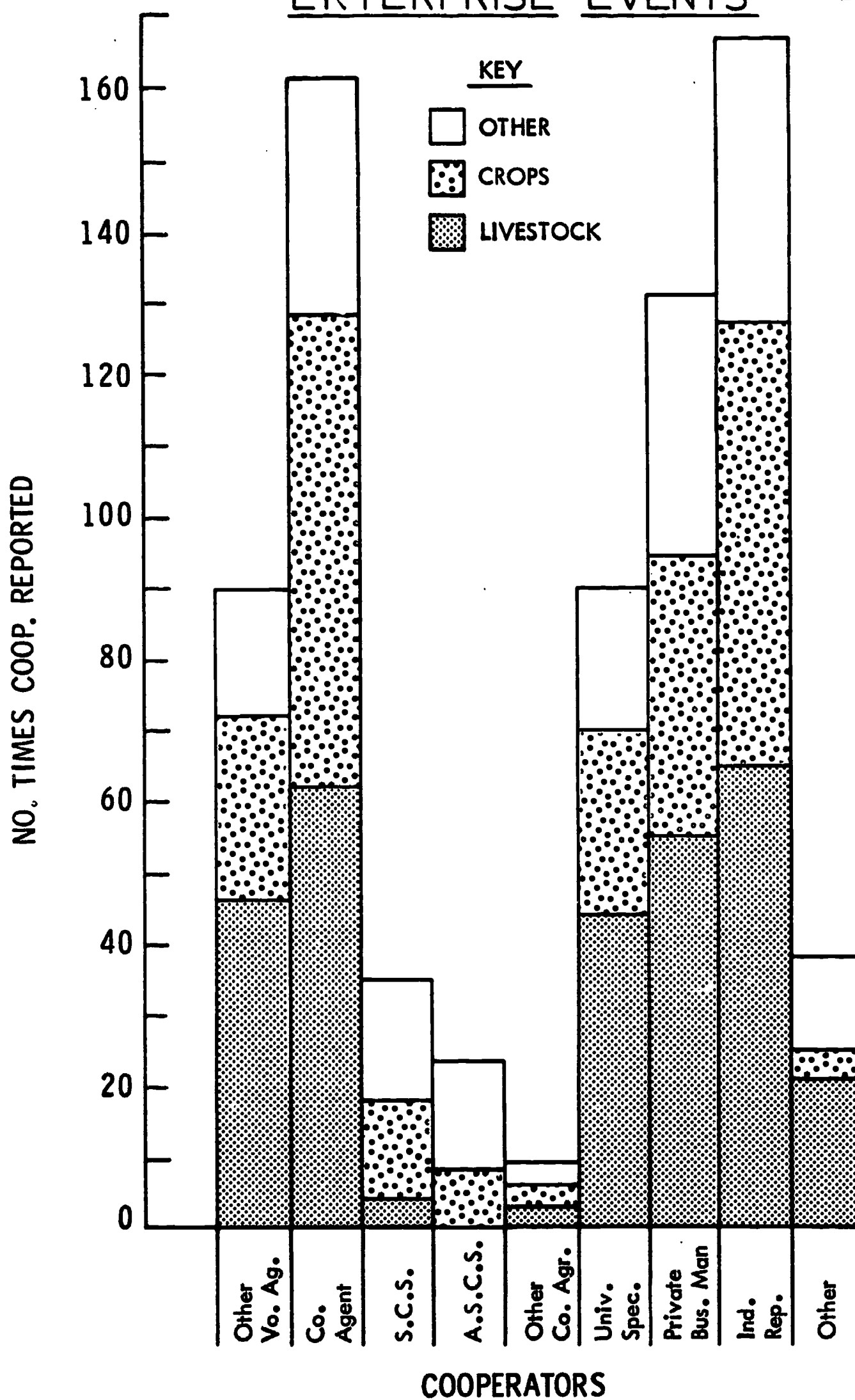


Figure 2. Cooperation in enterprise events.

### Agriculture Mechanics

While agricultural mechanics instruction encompasses a wide range of activity, the information has been collated into two major activity headings; welding and other instruction. Other ag mechanics instruction includes such topics as materials handling, power and power use, farm equipment and machinery, farm structures, agricultural electricity and the mechanical aspects of soil and water conservation.

Cooperation in agricultural mechanics events is illustrated in Figure 3.

### Farm Management

Farm management instruction is divided into two major parts, organized farm management instruction and other miscellaneous management related activity. Organized instruction is in turn divided into farm records, farm business analysis and farm organization.

The extent of cooperation is illustrated in Figure 4.

### Special Events

In addition to the organized instructional programs as illustrated for enterprise, or mechanics and farm management events, instructors participate in a wide range of activities that are usually short, intensive, educational events open to the public. Examples of these activities are crop field days, livestock housing tours, weed control demonstration plots, varietal trial plots, shows, fairs and other similar events.

The cooperation among agencies is illustrated in Figure 5.

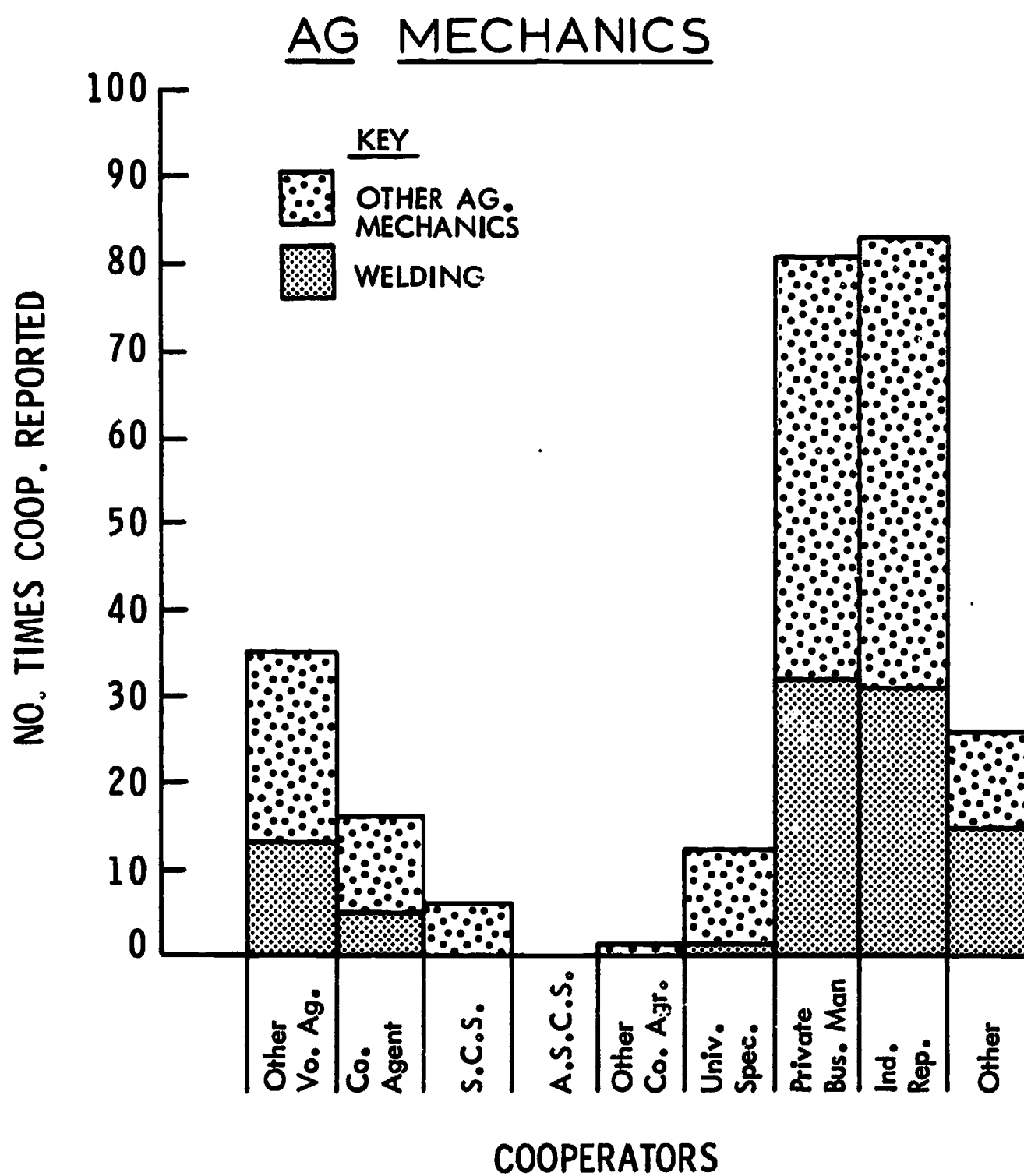


Figure 3. Cooperation in agricultural mechanics events.

## FARM MANAGEMENT

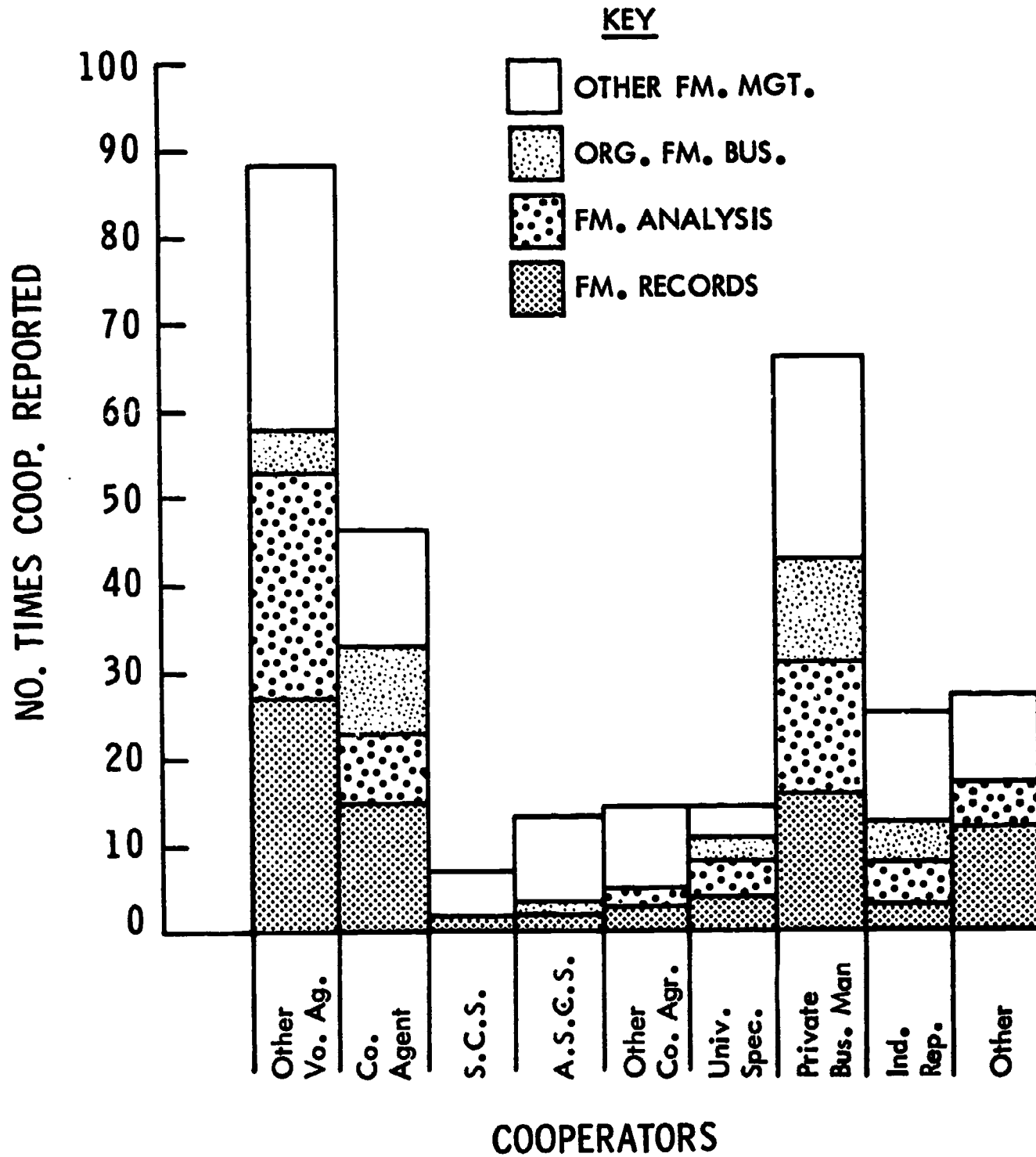


Figure 4. Cooperation in farm management events.

# SPECIAL EVENTS

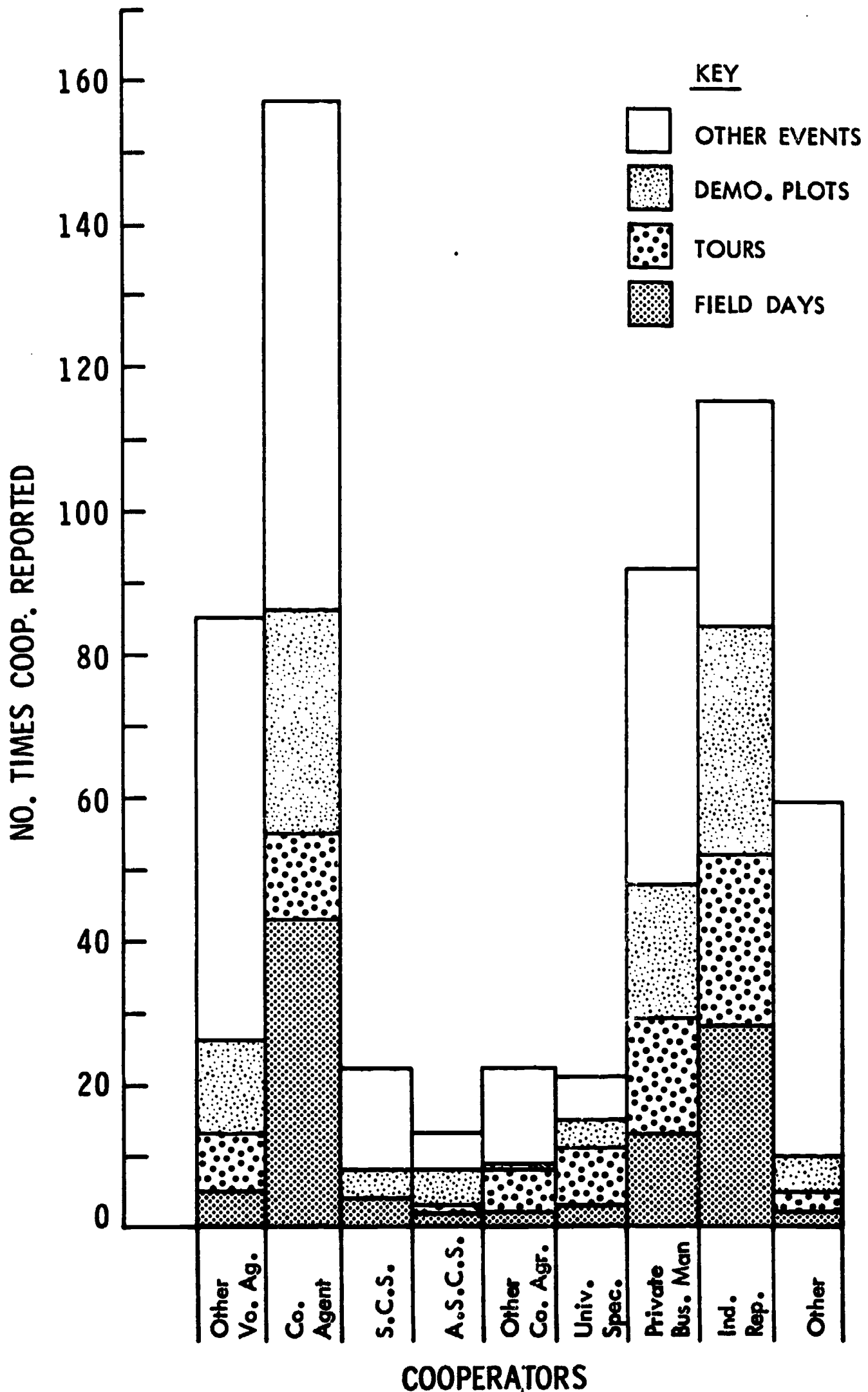


Figure 5. Cooperation in special events.

## IN WHAT WAY DID OTHERS COOPERATE

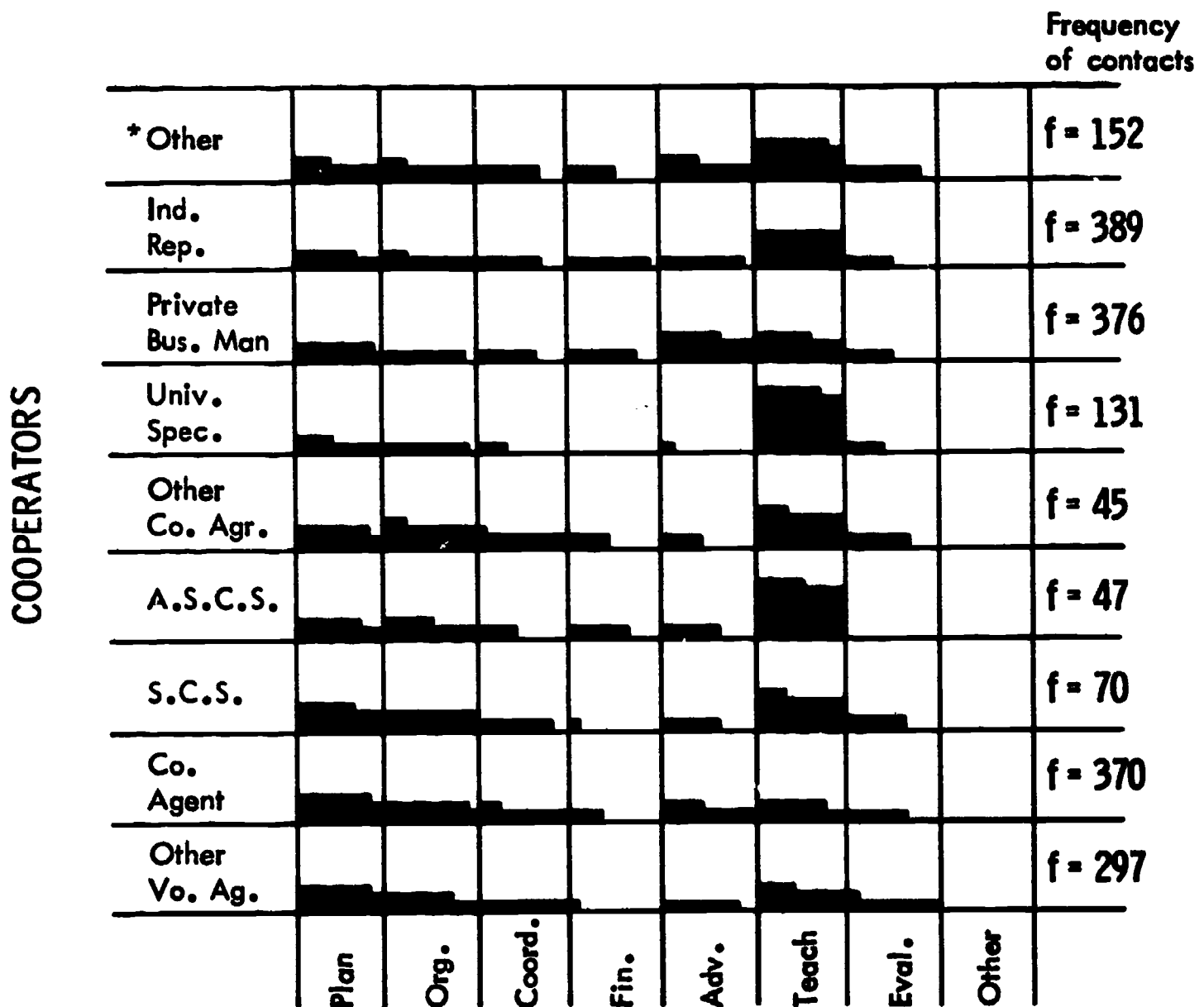
While it is important to know what agencies or individuals normally cooperate in the conduct of an adult education program in agriculture it is equally important to understand the nature of the cooperative effort.

Each respondent was asked to indicate the functions performed by his cooperating agents. The functions were defined as:

- a) Planning (Plan)
- b) Organizing (Org)
- c) Coordinating (Coord)
- d) Financing (Fin)
- e) Advertising (Adv)
- f) Teaching (Teach)
- g) Evaluating (Eval)
- h) Other (Other)

Since it was likely that some cooperators performed functions differently from others, or in differing amounts, the data were assembled to illustrate the role each cooperator played in the conduct of the program. The functions are graphically illustrated in the figures which follow. The percent of time that a cooperator was reported to have performed one of the specific functions is indicated by the row x column diagram. For example, in Figure 6, other Vo-Ag Instructors were reported to have cooperated in 297 events, in these events, 28 percent of the time they assisted in planning, 17 percent in organizing, 10 percent in coordinating and so on.

## ALL EVENTS



## FUNCTIONS - % OF CONTACTS REPORTED

\*The total of the percents charted for each row equals  $100\% \pm 1\%$ . Other vo-ag teachers, for example, were reported as cooperators in 297 events. 28% plan, 17% org., 10% coord., 1% fin., 8% adv., 24% teach, 11% eval.

Figure 6. Functions performed by cooperators in the conduct of all adult education events.



When all events are combined, the principal function performed by cooperators was teaching, followed by planning and organizing in that order. It should be noted, however, that not all cooperating agencies performed these functions in the same order of emphasis; county agents, for example, were reported more frequently in the planning and organizing function than they were in teaching.

#### Enterprise Events

In the enterprise events, there is a marked difference in the kind of functions performed by the various cooperating agents. A division can be made between generalists and specialists. Generalists such as the county agent and other vo-ag teachers cooperated in most of the functions with only a small portion of their effort (less than 30 percent) devoted to teaching, while those more specialized assisted more frequently with instruction.

Figure 7 illustrates the functions performed by each of the cooperating agents.

#### Agricultural Mechanics

The frequency with which others cooperated was lower in agricultural mechanics events than in other kinds of organized instruction, but the pattern of cooperation was very similar to that reported for enterprise classes. Again, the generalists divided their contributions among the functions while the specialists provided the most cooperation in the teaching function. An apparent exception was the Soil Conservation Service representative, who, although an expert in soil and water management, also gave considerable attention to planning and coordinating.

Figure 8 illustrates the functions performed by each of the cooperating agents in the agricultural mechanics area of instruction.

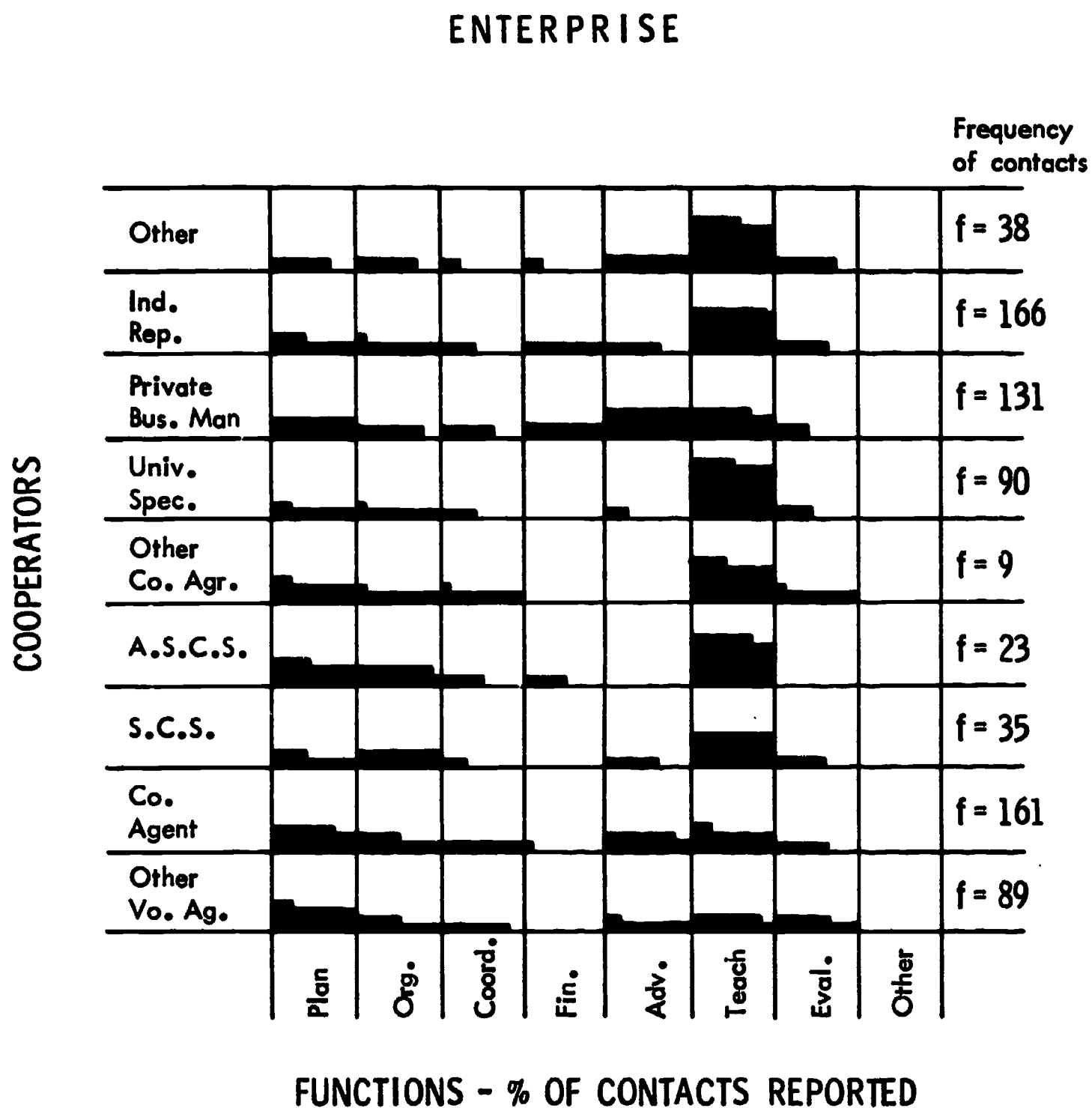
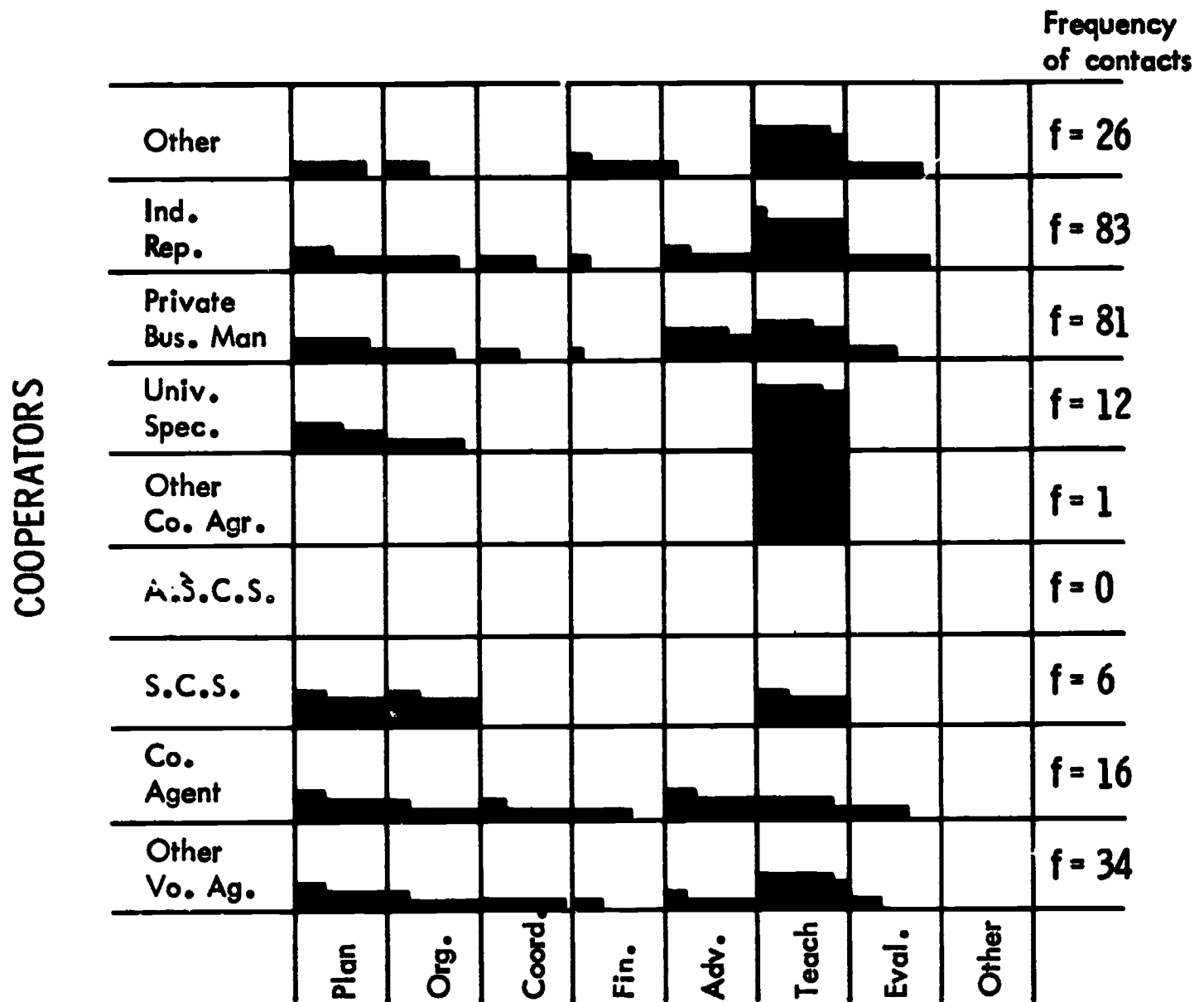


Figure 7. Functions performed by cooperators in the conduct of enterprise events.

## AG MECHANICS



## FUNCTIONS - % OF CONTACTS REPORTED

Figure 8. Functions performed by cooperators in the conduct of agricultural mechanics events.

### Farm Management

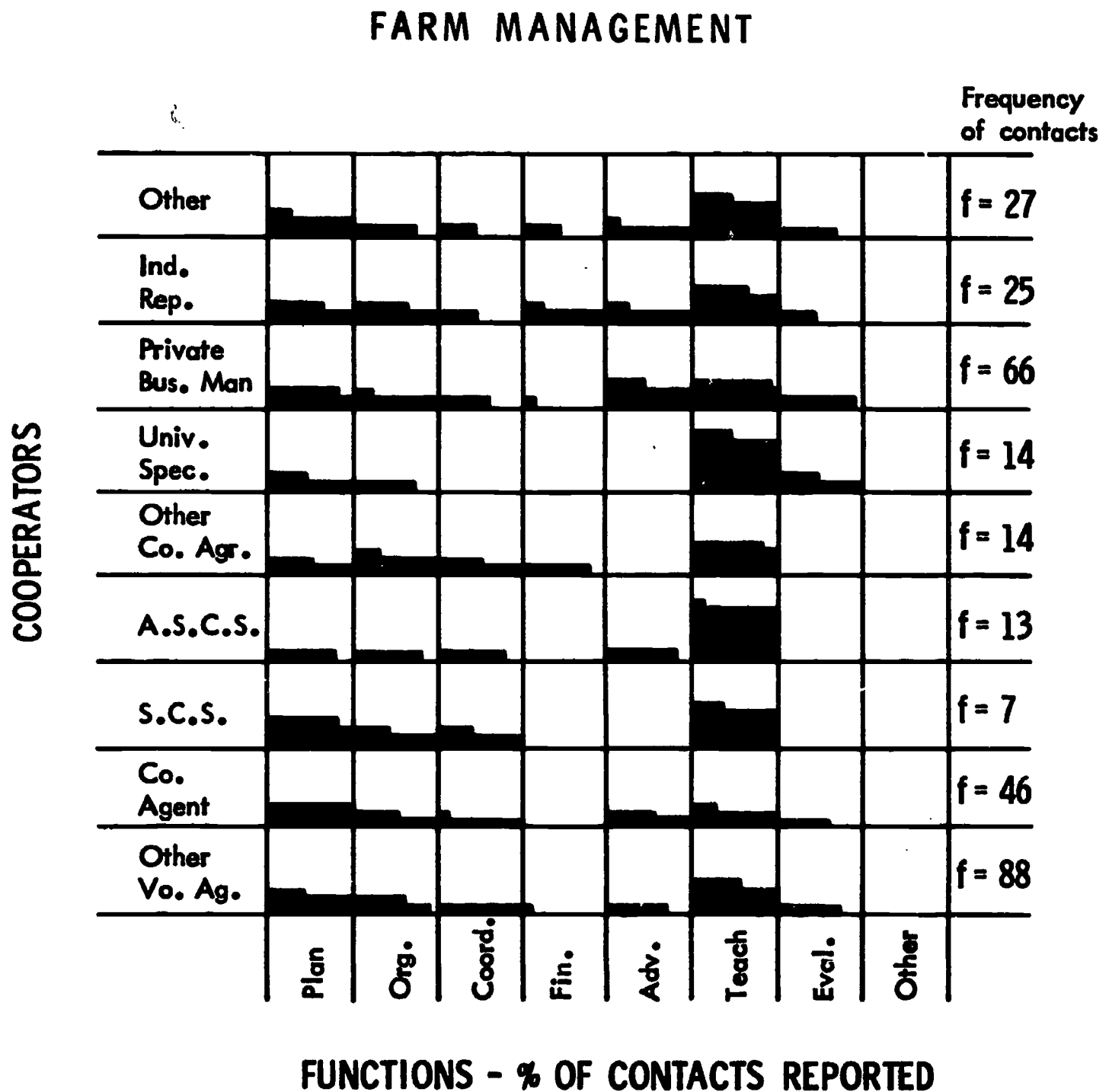
Cooperation in farm management programs is more diverse in function than is shown in other instructional areas. In this area, while teaching was still the function most frequently reported, other functions were mentioned with greater frequency. Planning and organizing occur more frequently as functions of cooperating agents than is true in the other instructional areas.

Figure 9 illustrates the functions performed by cooperating agents in the farm management events.

### Special Events

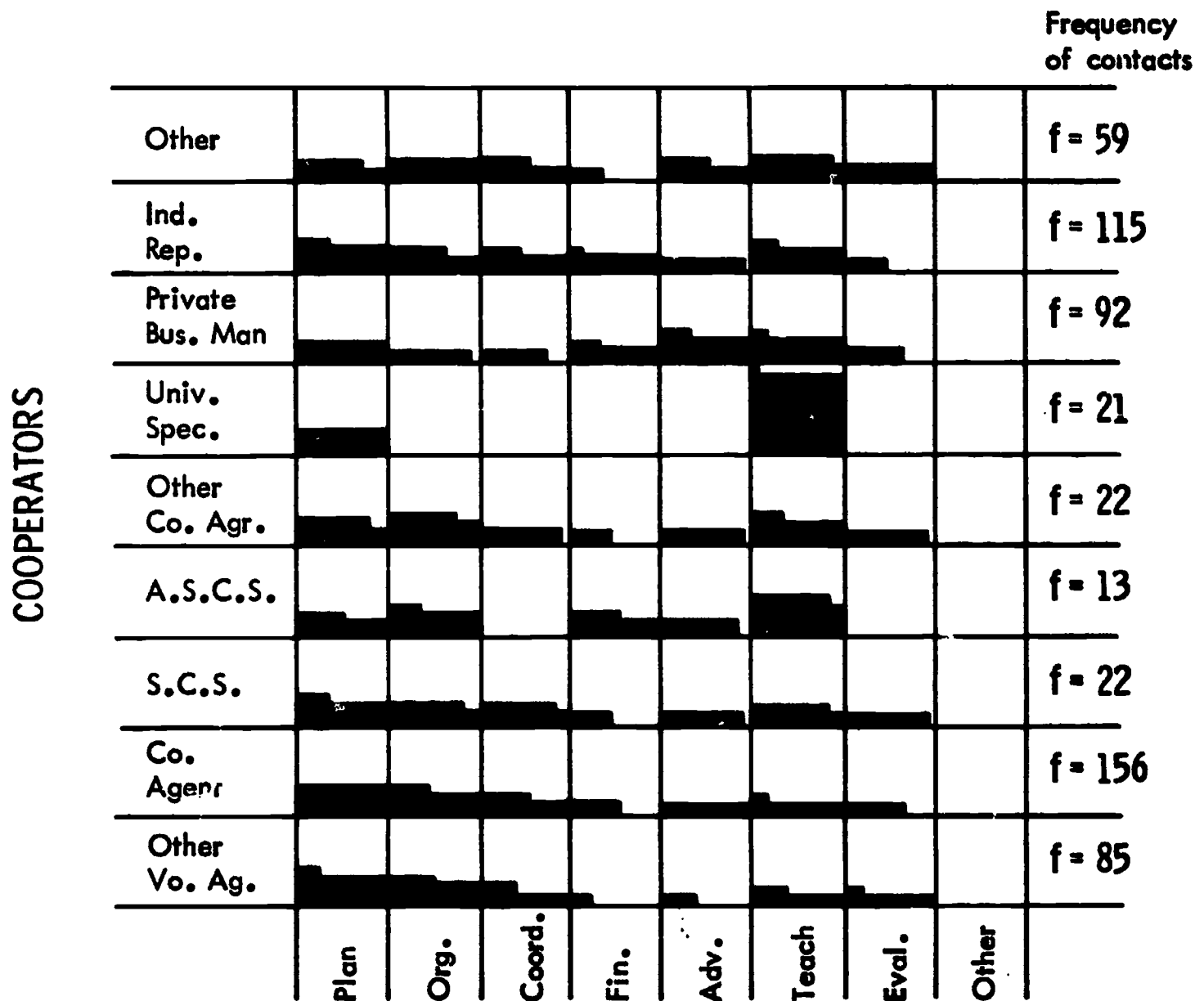
The profile of cooperation is more uniform in special events than in any other of the instructional groups. Probably because the special events are not usually aimed solely at instruction, the teaching function, with one exception, is not a primary cooperative function. In these events planning and organizing are important characteristics of the success of the event, thus cooperating agents participate with greater frequency in these functions. The financing function, almost non-existent in other instructional groups, was reported more frequently in the special events.

Figure 10 illustrates the functions performed by cooperating agents in special events.



**Figure 9. Functions performed by cooperators in the conduct of farm management events.**

## SPECIAL EVENTS



## FUNCTIONS - % OF CONTACTS REPORTED

Figure 10. Functions performed by cooperators in the conduct of special events.

### Summary

It is important to know how agents may be expected to cooperate as well as the probability of them cooperating. As illustrated in the preceeding figures, teaching is the most frequently reported function, while evaluation, financing and advertising do not appear to be major contributions of cooperating agents in general. Likewise, cooperators whose normal occupation is one with general functions project a profile of cooperation which is more general in nature by indicating participation in more of the functions associated with educational events. On the other hand, those whose normal role is one of specialization generally cooperate more in the teaching function than in the others.

The agents who make the greatest contribution in the advertising function generally come from the private business sector.

## HOW VALUABLE WAS THE COOPERATION

Teachers were asked to make a simple subjective evaluation as to the value of the contribution of the cooperating agents. This evaluation was indicated by checking one of the five categories that ranged from "very valuable" to "caused the event to be unsuccessful."

The evaluations made by teachers are presented in Table 1 and grouped into the four main instructional categories.

About 95 percent of the cooperative efforts were judged to be either very valuable or valuable by the teacher evaluation. Of the others, less than one percent were judged to have hindered the event in any way.

Farm management and special events drew the highest proportion of responses in the neutral "did not add or subtract" category.

Table 1. Evaluation of Cooperation of Agencies in Four Adult Instructional Categories by Number Reporting and Percent in Each Evaluation Category.

| EVALUATION RATING      |                |                |                         |                    |                                     |
|------------------------|----------------|----------------|-------------------------|--------------------|-------------------------------------|
| Categories             | Very Valuable  | Valuable       | Did Not Add or Subtract | Hindered the Event | Caused the Event to be Unsuccessful |
| Enterprise             | 222<br>(51.7%) | 189<br>(44.0%) | 17<br>(3.9%)            | 2<br>(.4%)         | 0<br>(0%)                           |
| Agricultural Mechanics | 83<br>(50.7%)  | 77<br>(46.9%)  | 4<br>(2.4%)             | 0<br>(0%)          | 0<br>(0%)                           |
| Farm Management        | 102<br>(57.7%) | 65<br>(36.7%)  | 10<br>(5.6%)            | 0<br>(0%)          | 0<br>(0%)                           |
| Special Events         | 169<br>(58.0%) | 101<br>(34.7%) | 16<br>(5.4%)            | 4<br>(1.3%)        | 1<br>(.3%)                          |
| Totals for All Events  | 576<br>(54.2%) | 432<br>(40.7%) | 47<br>(4.4%)            | 6<br>(.6%)         | 1<br>(.1%)                          |

In general, it can be said that when cooperation does occur those responsible for the event (in this case teachers of agriculture) judge the cooperative effort to be valuable.

Another question that might be asked relates to the pattern of response for those whose cooperation was ranked as either neutral or deleterious to the success of the event. Cooperation evaluations were examined to determine if there was any specific agent or agencies who received poor ratings on the evaluation scale. The results of this examination are reported in Table 2.



Table 2. Frequency of Neutral or Undesirable Evaluations of Cooperating Agents by Instructional Categories and Total Events Reported in Each Category.

| COOPERATING AGENT      |  |               |              |        |      |          |           |              |               |
|------------------------|--|---------------|--------------|--------|------|----------|-----------|--------------|---------------|
| Instructional Category |  | Other Teacher | County Agent | SCS    | ASC  | Other Ag | Univ Spec | Priv Bus Man | Bus Rep Other |
| Enterprise-A           |  | 1             | 6            | 1      | 1    | 1        | 0         | 8            | 1 5           |
| -B                     |  | 91            | 161          | 35     | 24   | 9        | 90        | 131          | 166 38        |
| Agri -A                |  | 0             | 0            | 0      | 0    | 0        | 0         | 3            | 1 0           |
| Mechanics -B           |  | 35            | 16           | 6      | 0    | 1        | 12        | 81           | 83 26         |
| Farm Mgt -A            |  | 2             | 3            | 0      | 0    | 0        | 0         | 1            | 4 0           |
| -B                     |  | 88            | 46           | 7      | 13   | 14       | 14        | 66           | 25 27         |
| Special -A             |  | 2             | 6            | 0      | 2    | 0        | 0         | 2            | 5 4           |
| -B                     |  | 85            | 157          | 22     | 13   | 22       | 21        | 92           | 115 59        |
| Total -A               |  | 5             | 15           | 1      | 3    | 1        | 0         | 14           | 11 9          |
| All Events-B           |  | 249           | 380          | 71     | 50   | 46       | 137       | 370          | 389 150       |
| Total A ÷              |  |               |              |        |      |          |           |              |               |
| Total B                |  | (1.7%)        | (3.9%)       | (1.4%) | (6%) | (2.2%)   | (0%)      | (3.8%)       | (2.8%) (6%)   |

\*Line A is the frequency with which the cooperating agent was reported in the neutral or below category. Line B is the total events reported in each of the categories.

\*\*Total A ÷ Total B is the percent of total events for each agent where cooperation was judged to be neutral or below in value. However, of the 1892 events in which cooperation was reported, evaluations were reported on only 1062 cooperators.

Interpretation of Table 2 must be done with caution, since the total events reported in each category is not consistent with the number of evaluations received. Some respondents failed to complete the evaluation section of the data form, or submitted data which could not be accurately interpreted. The number of total cooperative efforts is reported only for a comparison basis. Thus while only 1 respondent reported the cooperation of the SCS representative to be neutral or below in value and 15 reported the county agent with a similar evaluation rank, the two cooperating agents were engaged in cooperative activity 71 and 380 times respectively.

There does not appear to be any marked difference between groups in the proportion of cooperators who ranked neutral or below in the value of the cooperation. Even though the difference between specific groups may be statistically different, the difference is of no practical value in planning, organizing or coordinating the cooperators effort, since in all cases the absolute differences are small.

## HOW FREQUENTLY ARE OTHER AGENCIES INVOLVED

Up to this point, cooperation has been viewed only in terms of the events in which two or more persons cooperated in the event. Still unanswered is the question, "How much do teachers of agriculture depend on others in the conduct of adult education?"

Respondents were asked to indicate the total number of events they

conducted during the year even if they had asked no one to cooperate with them. The results of the survey are illustrated in Figure 11.

Farm management events were reported as occurring more frequently than any other category. As shown in Figure 11, of the approximate 1060 such events, others were asked to cooperate only about 290 times or about 29 percent of the time.

In contrast, in special events, of which there were only about 450 reported, others cooperated 330 times, or 75 percent of the time. Enterprise events also depended heavily on cooperative efforts (510 of 780) followed by ag mechanics (370 of 800). Thus it appears that some phases of instruction depend more heavily upon cooperation than others.

The degree of specificity of the target population for instruction is related to the cooperative effort also. Farm management programs where each class has specific enrollees who remain members of the class for an extended period and where instruction is highly sequenced make the least use of the cooperation of others. Agricultural mechanics also has the characteristics of controlled enrollments because of the sequential nature of much of the instruction and therefore utilizes others in the operation of the program to a lesser degree. By contrast, enterprise classes and special events, generally open to the public and generally lacking the elements of sequence and specific enrollees as described previously use cooperators in the majority of the events to perform one or more of the functions previously described.

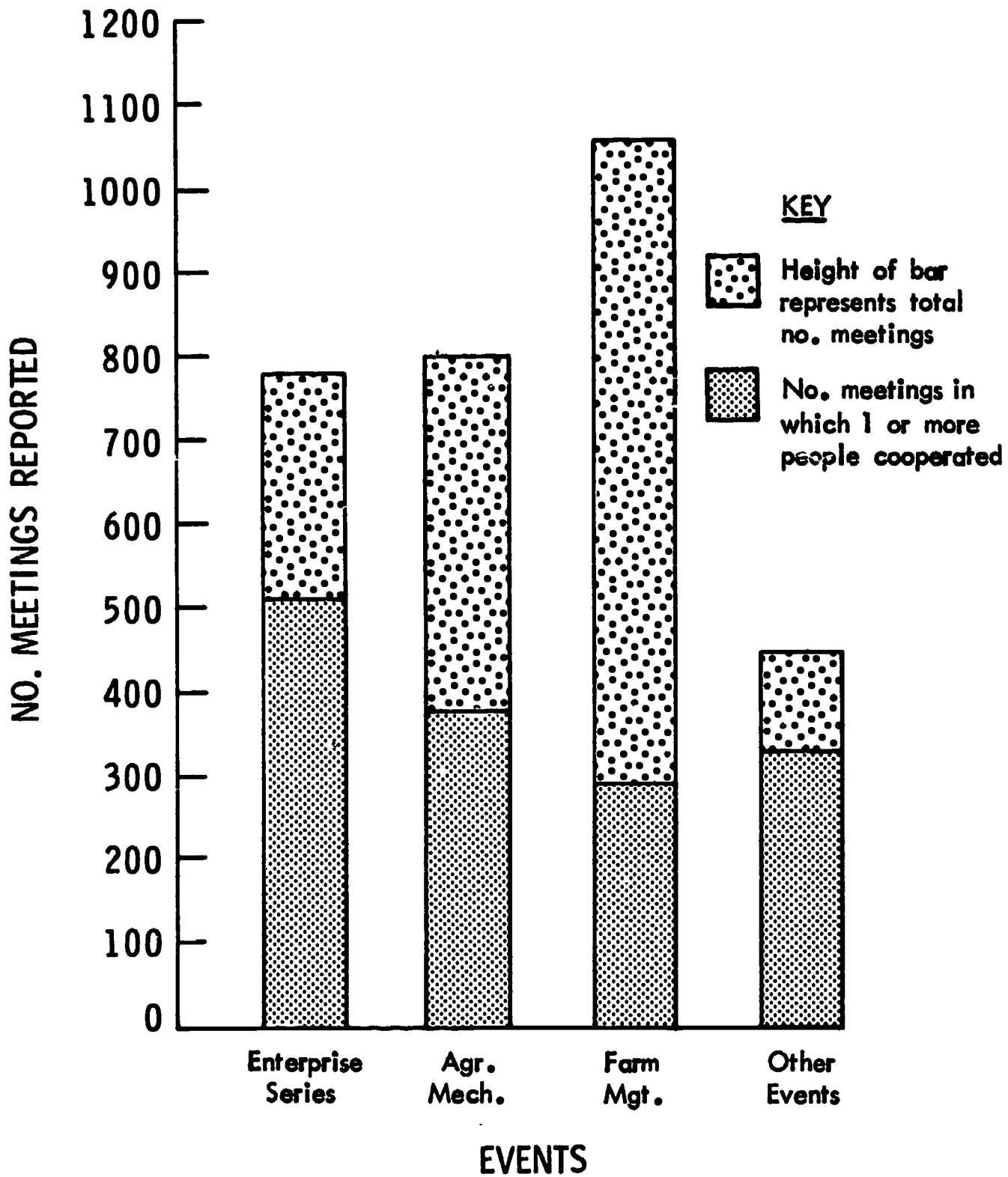


Figure 11. Total events in each instructional category and the total events in which others cooperated.

In summary, as the nature of instruction moves from highly sequential instruction and specific enrollees or target groups toward less systematic instruction and open enrollment, the use of others to help perform the several functions of the teacher expands.

## SUMMARY AND CONCLUSIONS

The study of cooperation in adult education was originally designed by a workshop group of agricultural educators meeting in the Central Regional Research Conference in Agricultural Education. As a result of the conference report, a study was organized to answer three main questions:

1. Who cooperates with teachers of agriculture in the conduct of adult education programs in local schools?
2. In what way do others cooperate? What functions do they perform?
3. How valuable does the teacher of agriculture perceive the cooperation to be?

The sampling frame consisted of all vocational agriculture teachers in North Dakota and South Dakota and those vocational agriculture teachers in Minnesota who were assigned to spend one quarter or more of their effort with adult instruction.

A survey instrument was developed to answer the three primary research questions and delivered by mail to each teacher. One hundred and ninety-nine usable responses were received and analyzed.

### Conclusions

There is wide diversity in the amount of cooperation received from among the potential cooperating groups. The principle groups which might be expected to cooperate, based on the results of this study are industry representatives, private businessmen, county agents and other agricultural

teachers. The SCS agency, ASCS agency, and other county agricultural agencies were not large contributors to the adult programs in Vo-Ag department.

In enterprise events, the same four agents or agencies as reported above predominate, but the university specialist becomes a fifth cooperator of prominence in these kinds of activities. The close association of specialists with the county agent plays a part in their use since the county agent is reported frequently to have a role in the planning, organizing and coordinating of such events. Since university specialists often work through the county agent system in arranging their yearly itinerary the close association of these two agencies in cooperative efforts is logical. It should be noted, however, that they do not perform similar roles. The county agent cooperates only 17 percent of the time in the teaching function in these events while the specialist cooperates 65 percent of the time in this function.

The role of all other cooperators is overshadowed by the cooperation of the businessman or industry representative in the conduct of the agricultural mechanics events. Teachers of agriculture can anticipate receiving little assistance in agriculture mechanics events from the other cooperating agencies with the exception of other teachers of agriculture. In these events, the teaching function receives less emphasis from cooperators than it does in the enterprise series, but is still the dominant function performed by most cooperators.

In farm management instruction, Other Vo-Ag teachers, County Agents and Private Businessmen dominate the field of cooperators, although as previously described, cooperation in these events occurs less frequently in proportion to the total events than it does in the other instructional categories. With these three dominant cooperating groups, the teaching

function is not their primary role. The combined contributions in planning, organizing and conducting overshadow other functions they may perform.

In conducting special events, vocational agriculture teachers have received the most cooperation from other teachers, county agents, private businessmen, industry representatives and others (not specified). The primary cooperators participate in all seven of the specified functions. Except for the University specialists none of the cooperating groups makes its major contribution to the teaching function.

With only a few exceptions, vocational agriculture teachers perceive the cooperation of others to be valuable or very valuable to the success of adult education events. There is no consistent pattern to the agent or agencies whose cooperation was considered to be of neutral or negative value in conduct of the event.

In general, teachers of agriculture rely heavily upon others to assist in the functions associated with the conduct of an adult education program in agriculture. The degree of reliance is associated with the kind of program offered. Programs for specific target groups or programs where instruction is highly sequential depend less on others than do other kinds of programs.

Few cooperating agencies with the exception of private businessmen make any significant contribution to the financing of events, but since events in this study are primarily associated with the public school, outside financial aid is generally not a significant factor in operating the program.

The functions of planning, organizing and coordinating are shared with most of the cooperating agencies. It may be significant to note that university specialists who are depended upon to make significant contributions in



teaching are not used to any significant degree in planning events.

Also lacking is the use of cooperating agencies in the evaluation of the events. Since evaluation is a vital part of the planning process, it would appear appropriate for teachers of agriculture to secure more cooperative involvement of others in the evaluation function. Of the seven specified cooperating agencies, only other vo-ag teachers were reported to have served in the evaluation function at least 10 percent of the times reported.

The task of adult education in agriculture is a large one; too large to be served by any one group in isolation from others. Through the cooperative involvement of other agencies, vocational agriculture teachers should be able to conduct more useful programs in adult education. They should seek the help and advice of other agencies in performing the many functions associated with a successful program in adult education in agriculture.

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## APPENDIX A

### A FEW QUESTIONS TO HELP US ANALYZE THE RESULTS OF THE PROFESSIONAL COOPERATION STUDY

1. Proportion of time spent in adult education. (Check one)

\_\_\_\_\_ Full time    \_\_\_\_\_  $\frac{1}{2}$  or more but    \_\_\_\_\_  $\frac{1}{2}$  or more but    \_\_\_\_\_ Less than  
   less than full time    less than  $\frac{1}{2}$  time     $\frac{1}{4}$  time

2. If you also teach in the secondary or post secondary school, how many hours per day do you normally spend in classroom instruction or supervision with high school and post secondary students? (Formal classes, study halls, small group and individual instruction)

\_\_\_\_\_ 1    \_\_\_\_\_ 2    \_\_\_\_\_ 3    \_\_\_\_\_ 4    \_\_\_\_\_ 5    \_\_\_\_\_ 6    \_\_\_\_\_ 7

3. How many years have you taught?

\_\_\_\_\_ 1-2    \_\_\_\_\_ 3-5    \_\_\_\_\_ 6-9    \_\_\_\_\_ 10-15    \_\_\_\_\_ 16-25    \_\_\_\_\_ More than 25

4. How far is your school from the offices of other government agricultural specialists such as co-agent, SCS planner, etc?

\_\_\_\_\_ Same town    \_\_\_\_\_ Less than 5 miles    \_\_\_\_\_ 6-10 miles    \_\_\_\_\_ 10-20 miles  
\_\_\_\_\_ More than 20 miles.

(You can leave items 5 and 6 blank if you wish, but we would like to know who is answering so we can be sure the total sample is representative of the ag profession.)

5. Name \_\_\_\_\_

6. School \_\_\_\_\_

## FORM 1

## COOPERATION IN ADULT EDUCATION IN AGRICULTURE

Events for Which the Teacher was Primarily Responsible and Taught Cooperation at Others (July 1, 1970 - June 30, 1971)

| A  | B   | C   |   |   |   |   |   |   |   |   |    | D   |            |              |           |             | E   |            |               |          |                         |                    |                                 |
|--|---|---|---|---|---|---|---|---|---|---|----|---|------------|--------------|-----------|-------------|---|------------|---------------|----------|-------------------------|--------------------|---------------------------------|
|  |   | Person or Person(s) Who Cooperated in Event |   |   |   |   |   |   |   |   |    | Function in Which the Teacher or Persons Cooperated (Identify Cooperator by Number) |            |              |           |             | Your Rating of the Value of the Contribution Made by the Cooperator (Person or Person(s) (Identify Cooperator by Number)) |            |               |          |                         |                    |                                 |
| Number of Meetings or Events Held                        | Number of Meetings or Events in Which Others Cooperated | 1   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Planning  | Organizing | Coordinating | Financing | Advertising | Teaching or Presenting  | Evaluating | Very Valuable | Valuable | Did not add or subtract | Hindered the Event | Caused Event to be Unsuccessful |
| Adult Education Event                                    |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| In Which Vo-Ag Teacher Participated as Initial Organizer |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Kind of Event  |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Enterprise Class Series in:                              |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Dairy Production   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Beef Cow Herd  |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Swine Production   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Sheep Production   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Poultry Production                                       |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Animal Nutrition   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Crop Production  |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Others (Specify)   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Others (Specify)   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Others (Specify)   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Agriculture Mechanics Series                             |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Welding  |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Farm Power and Machinery                                 |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Farm Structures  |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Electricity  |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Others (Specify)   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Others (Specify)   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Others (Specify)   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Farm Management  |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Farm Records and Accounts                                |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Analysis of Farm Business                                |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Organizing the Farm Business                             |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Others (Specify)   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Others (Specify)   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Special Events   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Field Days - Livestock                                   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Field Days - Crops                                       |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Field Days - Other                                       |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| - Others   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Tour   |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Demonstration Plots                                      |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Fairs and Shows  |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Community Service Activities                             |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| Other Prior Events not listed above                      |   |   |   |   |   |   |   |   |   |   |    |   |            |              |           |             |   |            |               |          |                         |                    |                                 |
| SAFAR: Safe Corn Harvest Campaign                        | 2   | 2   |   |   |   |   |   |   |   |   |    | 2,7   |            |              |           | 7           | 2   |            |               | 7        | 2                       |                    |                                 |

In the Safe Corn Harvest Campaign the county agent and the local news editor cooperated (2 and 7). Both helped in the planning.

The county agent helped present both versions and the editor helped advertise the event. The cooperation was evaluated a very valuable (7) and successful (7).